

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107-4431

SUBJECT: Approval of an Additional Funding Request
Palmerton Zinc NPL Site
Palmerton, Carbon County, Pennsylvania
FROM: Thomas C. Voltaggio, Director
Hazardous Waste Management Division (3HW00)
TO: Elliot P. Laws, Assistant Administrator
Office of Solid Waste and Emergency Response (5101)
THRU: Stephen D. Luftig, Director
Office of Emergency and Remedial Response (5201)
ATTN: Thomas R. Sheckells, Director
Regions 3/8 Accelerated Response Center (5201G)

MAY 31 1995

ISSUE

The attached Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Ceiling Increase pertains to the Palmerton Zinc NPL Site in Palmerton, Carbon County, Pennsylvania which is on the National Priorities List (NPL). A removal site assessment performed in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) 40 CFR Part 300, by the staff in Region III has identified an imminent and substantial threat to public health or welfare or the environment due to the threat of release and current releases of hazardous substances, pollutants or contaminants at the Site. These substances pose the continued threat of an uncontrolled release and potential inhalation and ingestion hazards to persons at the Site. This Removal Action is the result of an early action requested by the Remedial Program.

Because the conditions at the Site continue to meet the criteria set forth in the NCP, Section 300.415 for Removal Actions and the criteria in CERCLA Section 104(c)(1)(C) (Exemption to the \$2 Million and 12-Month limit for Removals based on the consistency waiver), and pursuant to the Delegation of Authority 14-2-B giving the Director, Hazardous Waste Management Division, the authority to approve continued Removal Actions above \$2 Million and 12 months pursuant to the consistency waiver at NPL Sites, Region III has approved the use of additional CERCLA funds in the amount of \$1,305,662 to mitigate the threat to public health and the environment. The new Project Ceiling is \$4,934,000, of which \$4,604,000 is for Extramural Costs.

Attachment: Request for Additional Funds

AR500216

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania, 19107-4431

SUBJECT: Request for Additional Funds
Palmerton Zinc NPL Site
Interim Removal Action
Palmerton, Carbon County, Pennsylvania

MAY 31 1995

FROM: *PS* Michael Towle, On-Scene Coordinator
Removal Response Section (3HW31) *Charles Klewen*

TO: Thomas C. Voltaggio, Director
Hazardous Waste Management Division (3HW00)

THRU: Abraham Ferdas, Associate Director
Office of Superfund (3HW02) *Abraham Ferdas*

I. ISSUE

A removal assessment performed in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300, by the On-Scene Coordinator (OSC) has identified a continued threat to human health, welfare, and the environment due to the presence of high concentrations of lead and cadmium in residential soils and household dust at the Palmerton Zinc National Priorities List (NPL) Site in Palmerton, Carbon County, Pennsylvania. The OSC has determined that the Site continues to meet the criteria for a Removal Action under Section 300.415 of the NCP, and continues to meet the statutory exemption criteria based on the consistency waiver to continue Removal Actions beyond 12 months and \$2 Million provided in Section 104(c)(1)(C) of the Comprehensive Environmental Response, Compensation and Liability Act, (CERCLA) 42 U.S.C. Section 104(c)(1)(C).

On December 13, 1994, \$3,628,338 was approved by the Region to address contaminated soils and household dust at the Site. Due to unanticipated interest in the cleanup action, additional funding in the amount of \$1,305,662 is needed to mitigate the continuing threat to public health and the environment posed by the Site. Approval of this Request for Additional Funds will raise the Estimated Total Project Ceiling to \$4,934,000, of which \$4,604,000 are Extramural Costs.

II. BACKGROUND

See attached Request for Additional Funds, Clarification of Scope, and an Exemption to the 12-Month and \$2 Million Statutory Limit Action Memorandum, dated December 13, 1994.

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The original Action Memorandum (February 1994) anticipated that approximately 45 residential properties would be addressed. At the time of the December 1994 Action Memorandum, it was anticipated that approximately 55 homes would be addressed and that sampling would be completed at 110 homes. At this time, the Environmental Protection Agency (EPA) has conducted sampling activities at over 200 locations, and it is expected that 50 to 100 more locations may be sampled. In addition, the cleanup action has been initiated at 72 locations with interest in the program continuing to remain high. As such, it is anticipated that cleanup may be initiated at approximately 100 residences. Additional funding is needed to continue to mitigate threats posed by contaminated soil and dust at eligible properties.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

Section 300.415 of the NCP lists the factors to be considered in determining the appropriateness of a Removal Action. Paragraphs (b)(2)(i), (iv), (v), and (vii) of Section 300.415 directly apply as follows to the conditions at the Palmerton Zinc Site:

300.415 (b)(2)(i)

"Actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants"

The high levels of lead (e.g., 1500 mg/kg) and cadmium (e.g., 100 mg/kg) in the soils and/or household dust at the Site pose an imminent and substantial endangerment, especially to young children, through ingestion and inhalation pathways. The Region III toxicologist concludes (through the use of the Integrated Exposure Uptake Biokinetic Model) that exposure to lead levels of 1500 mg/kg in soil and dust may result in 41% of exposed children (ages 6 months to 6 years) to exceed the 10 ug (Pb/dL blood level established by the Centers for Disease Control (CDC) for triggering exposure prevention activities. In addition, exposure to cadmium levels of 100 mg/kg may result in a situation where exposed young children may exceed (by a factor of 2.5) the highest daily dose of cadmium, which is expected to be without adverse effect in human populations. The OSC has witnessed young children playing in contaminated soil and/or dust on numerous occasions.

300.415 (b)(2)(iv)

"High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate"

Surface soils at the Site are heavily contaminated with lead and cadmium. Historically, zinc smelter emissions have defoliated the area leaving many bare and sparsely vegetated areas within the Borough of Palmerton. The non-vegetated contaminated surface soil is tracked into residences leading to the existing contaminated house dust.

300.415 (b)(2)(v)

"Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released"

The contaminated surface soils have poor vegetative cover. At present, the soils are exposed to normal weather conditions for the area (wind and rain). The contaminants, given the present soil conditions, are likely to migrate.

300.415 (b)(2)(vii)

"The availability of other appropriate Federal or State mechanisms to respond to the release"

The Pennsylvania Department of Environmental Protection (PADEP) does not possess the resources at this time to effect the necessary removal response action at the Site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Actions

The action proposed for the portion of the Palmerton Zinc Site concerning lead and cadmium contamination in homes is designed to eliminate the imminent threat posed to human health, welfare, and the environment by the Site. The proposed action is to continue previously approved actions as follows:

- Determine which residential areas are to be targeted for action by this response based on sampling information gathered and a population audit. The response action is targeted for those homes indicated above where contamination exceeds either 1500 ppm lead or 100 ppm cadmium, as detailed

in the attached Action Memorandum (and attachments), dated December 13, 1994, and where children six years old and younger and/or pregnant women reside or spend a significant amount of time (target population). The response action will also include day care centers, and other common use areas where the target population may be subject to exposure. In addition, the OSC shall have the authority to include other residences which have children six years old and younger, and whose blood lead levels exceed 10 micrograms per deciliter (ug/dl), or other situations where unacceptable health risks are posed. It is estimated that approximately 300 homes will be sampled and 100 homes may be affected by the cleanup action.

- Implement soil conditioning, rotor-tilling and general vegetative cover amendments (i.e., fertilizers and other substances directed to reduce bare areas) to reduce the imminent hazard caused by the exposure of the above mentioned target population to contaminated surficial soils. In addition, conduct excavation of contaminated sand and soil where necessary. Excavation is intended to be limited to those areas of high use by the target population (i.e., play areas). Backfill those areas excavated.
- Remove contaminated dust from interiors of homes targeted, and, where appropriate, replace contaminated furniture or furnishings.
- Properly dispose of contaminated material (soil, dust, interior furnishings, etc.) produced during the cleanup action.
- Conduct monitoring and sampling of soils and household dust as necessary to monitor the cleanup activities. Conduct monitoring of blood lead levels as necessary to protect human health and the environment.
- Replace, to the extent practicable, vegetation destroyed during the response action.
- Provide for temporary relocation of residents affected during the response action.
- Notify State and Local authorities of post removal Site conditions.

The OSC has determined, based on consultation with the Regional toxicologist, that the threats posed at this Site continue to warrant action within 6 months, and that this removal is considered a time-critical action as that term is defined in the NCP.

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B. Estimated Costs

	<u>Current Ceiling</u>	<u>Costs to Date</u>	<u>Proposed Ceiling</u>
<u>Extramural Costs</u>			
Regional Allowance Costs			
ERCS	\$2,333,903	\$1,943,000	\$3,580,000
US Coast Guard	60,000	47,613	50,000
Extramural Costs not Funded from the Regional Allowance			
Extramural Contingency	478,780	---	358,000
TAT	106,916	288,480	500,000
Other	---	---	60,000
Subtotal	\$2,979,599	\$2,279,093	\$4,548,000
Project Contingency	446,939	---	56,000
Total Extramural	\$3,426,538	\$2,279,093	\$4,604,000
<u>Intramural Costs</u>			
Direct Costs	\$ 73,800	\$ 73,000	\$ 120,000
Indirect Costs	128,000	135,000	210,000
Total Intramural	\$ 201,800	\$ 208,000	\$ 330,000
TOTAL PROJECT CEILING	\$3,628,338	\$2,487,093	\$4,934,000

C. Contribution to Remedial Performance

The purpose of the response action is to eliminate or reduce potential pathways of exposure from the lead and cadmium contamination. This response action is consistent, to the extent practicable, with the overall objectives and recommendations of the RI/FS for OU #3 previously undertaken by Paramount Communications Inc. (the predecessor of Viacom International Inc.) and additional investigations currently underway by EPA Region III, National Enforcement Investigations Center (NEIC), and ATSDR, which are to develop alternatives for Site remediation, to identify the source(s) of contamination, and establish the risks associated with the Site contamination. This Removal Action will assist in containing soil contamination, reducing exposure to household dust contamination, and reducing the qualitative risk associated with continued exposure by the target population to high levels of lead and cadmium.

The proposed activities are consistent with the long-term remedy and are not anticipated to impede future responses.

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D. Compliance With ARARS

The proposed Removal Action set forth in this Memorandum will comply with applicable or relevant and appropriate environmental and health requirements to the extent practicable, considering the exigencies of the situation. This includes EPA's Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities, OSWER Directive #9355.4-12, July 14, 1994.

In December 1992, the RPM requested PADEP to identify any State ARARS which should be considered in this Removal Action, but as of yet, has not received them for the Site. Federal and State ARARS will be complied with to the extent practicable during all phases of this Removal Action.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD NO ACTION BE TAKEN OR ACTION DELAYED

If no action is taken or the action is delayed, the direct contact, inhalation, and ingestion threats posed by the Site to the target population to high levels of lead and cadmium in the surface soil and household dust will continue. The impact of lead and cadmium on humans is well documented, and the exposure to high levels of lead and cadmium poses a serious threat to public health.

VII. EXEMPTION FROM STATUTORY LIMITS

The proposed Removal Actions identified in this document meet the consistency exemption criteria of CERCLA 104(c) as amended by SARA, for continued response beyond the 12-month and \$2 Million statutory limit for Removal Actions. Specifically, the proposed actions are both appropriate and are believed to be consistent with the remedial action to be taken at the Site. The Site continues to meet the consistency exemption criteria in Section 104(c) of CERCLA, 42 U.S.C., Section 9604(c), to exceed the \$2 million statutory limit for Removal Actions as documented in the attached Request for Additional Funds, Clarification of Scope, and an Exemption to the 12-Month and 2 Million Statutory Limit Action Memorandum, dated December 13, 1994.

VIII. ENFORCEMENT

The EPA Region III Enforcement Section has been provided with all background information available to pursue any and all enforcement actions pertaining to the Palmerton Zinc Site. (See Confidential Enforcement Addendum)

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IX. RECOMMENDATION

Because the conditions at the Palmerton Zinc Site continue to meet the NCP Section 300.415 criteria for a Removal Action, I recommend your approval of this Ceiling Increase to abate the imminent threat to the public health and the environment presented by these conditions. Your approval would raise the Total Project Ceiling from \$3,628,338 to \$4,934,000, of which \$4,604,000 is for Extramural Costs. You may indicate your approval or disapproval by signing below.

APPROVED: _____**DATE:** 8/31/96**DISAPPROVED:** _____**DATE:** _____

Attachment: Request for Additional Funds, Clarification of Scope, and an Exemption to the 12-Month and \$2 Million Statutory Limit Action Memorandum, dated December 13, 1994

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